Ammodramus nelsoni (Nelson's Sparrow)

Report Date: January 13, 2016

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Aves (Birds)

Order: Passeriformes (Perching Birds)

Family: Emberizidae (Bunting, Juncos, Longspurs, Sparrows And Towhees)

General comments:

Regionally endemic subspecies with many threats to breeding population; known to occur at 50+ sites; hybridizes at southern range edge with Saltmarsh Sparrow. High vulnerability to climate change (with high confidence); based on 3 reviewers

Species Conservation Range Maps for Nelson's Sparrow:

Town Map: <u>Ammodramus nelsoni_Towns.pdf</u>
Subwatershed Map: <u>Ammodramus nelsoni_HUC12.pdf</u>

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation: NA

State Special Concern or NMFS Species of Concern:

Ammodramus nelsoni is listed as a species of Special Concern in Maine.

Recent Significant Declines: NA

Regional Endemic: NA

High Regional Conservation Priority:

United States Birds of Conservation Concern:

Bird of Conservation Concern in Bird Conservation Regions 14 and/or 30: Yes

High Climate Change Vulnerability:

Vulnerability: 3, Confidence: High, Reviewers: 3

Understudied rare taxa: NA

Historical: NA

Culturally Significant: NA

Habitats Assigned to Nelson's Sparrow:

Formation Name Freshwater Marsh

Macrogroup Name Wet Meadow-Shrub Marsh

Habitat System Name: Laurentian-Acadian Wet Meadow-Shrub Swamp Notes: Occasionally

Formation Name Intertidal

Macrogroup Name Intertidal Tidal Marsh (peat-forming)

Habitat System Name: Acadian Coastal Salt Marsh **Primary Habitat**
Habitat System Name: Coastal Plain Tidal Marsh **Primary Habitat**

Stressors Assigned to Nelson's Sparrow:

Stressor Priority Level based on Severity and Actionability

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity Actionability: Highly actionable

Notes: Loss of saltmarsh to sea level rise

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IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Storms and Flooding

Severity: Moderate Severity Actionability: Highly actionable

Notes: Reduced nesting success

IUCN Level 1 Threat Invasive and Other Problematic Species, Genes and Diseases

IUCN Level 2 Threat: Invasive Non-native-Alien Species-Diseases

Severity: Moderate Severity **Actionability:** Highly actionable

Notes: Green Crab

IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Air-Bourne Pollutants

Severity: Moderate Severity **Actionability:** Highly actionable

Notes: Hg: Susceptible though not as bad a SALS. Both are top predators of inverts in saltmarshes

IUCN Level 2 Threat: Industrial and Military Effluents

Severity: Moderate Severity Actionability: Highly actionable

Notes: Oil spills; booming strategies

Species Level Conservation Actions Assigned to Nelson's Sparrow:

*Only species specific conservation actions that address high (red) or medium-high (orange) priority stressors are summarized here.

Conservation Action Category: Survey and Monitoring Biological Priority: high Type: new

Develop a long-term monitoring program which allows for evaluation of effects of human perturbations, natural changes to habitat and management actions to reverse/mitigate such actions.

Stressor(s) Addressed By This Conservation Action

Air-Bourne Pollutants

Conservation Action Category: Research Biological Priority: moderate Type: new

Assess whether Mercury is a problem at marshes across Maine and whether certain marshes pose a higher risk

Stressor(s) Addressed By This Conservation Action

Air-Bourne Pollutants

Conservation Action Category: Research Biological Priority: moderate Type: new

Determine the relative impacts of point source (landfills) vs non-point source (atmospheric) contamination by Mercury on post-

fledgling survival

Stressor(s) Addressed By This Conservation Action

Air-Bourne Pollutants

Conservation Action Category: Research Biological Priority: high Type: new

Investigate what role, if any, non-native invasive species have in habitat loss or reduction in habitat quality. Determine mitigation measures appropriate for Maine saltmarshes.

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Stressor(s) Addressed By This Conservation Action

Invasive Non-native-Alien Species-Diseases

Guild Level Conservation Actions:

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This Species is currently not attributed to a guild.

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.